

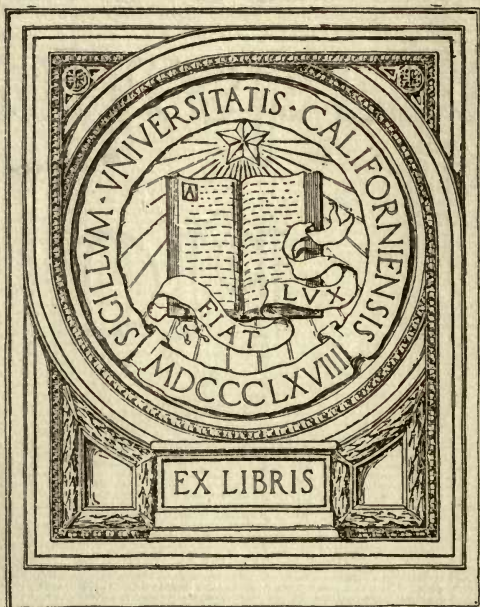
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THE  
BRITISH CURRENCY  
DECIMALISED AND IMPERIALISED;

TOGETHER WITH THE ADAPTATION OF  
THE METRIC WEIGHTS AND MEASURES  
TO IMPERIAL NEEDS.

(Second and Revised Edition)

BY  
W. W. LHARDWICKE

LONDON :  
WATTS & CO.,  
17 JOHNSON'S COURT, FLEET STREET, E.C.

PRICE SIXPENCE NET





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## PREFACE

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It would seem anomalous that an advanced and enlightened country, such as Great Britain, should be the only civilised nation in the world that has not yet decimalised its currency. But so it is. That the decimal or all-ten system of calculation is the most natural one is demonstrated to us by nature in the number of our fingers, which may be said to be nature's calculating machine; and that it is the most rational one is proved by the numerous advantages which it possesses. Most of us are aware of the inconvenience of the present irregular system of money, weights, and measures, and of the difficulty with which the business of international commerce is carried on. The waste of valuable time, and the costliness of clerical labour involved in the conversion of the above into the decimal systems of other countries, are simply enormous; and, if neglected, means to the British merchant loss of foreign contracts, and therefore loss of money. In our schools, too, the time wasted in teaching the complicated system of arithmetic rendered necessary by the existing state of chaos might be much more usefully employed in teaching English grammar and modern languages, now so glaringly neglected.

Although the use of the Metric System has been legalised, its use is, and will continue to be, limited in extent, until the coinage is decimalised, when both can work harmoniously together. It is at present chiefly confined to the medical profession, engineers, manufacturers of chemicals and drugs, and dealers in precious stones.

As regards the coinage, it matters little to the merchant how we decimalise so long as we do decimalise, and to the banker so long as we leave him his sovereign intact and readily recognisable without any arithmetical calculation. But, to the general public and the poorer classes, the method by which decimalisation is accomplished must be the simplest possible ; and to the latter it is of special importance that the coins of low value should be retained both in value and size, as far as possible as they exist at present.

The following pages will, it is hoped, satisfactorily demonstrate the fulfilment of the above qualifications, and show how easily, and with what few and unimportant changes, our present coinage can be placed in decimal sequence, and adapted for use throughout the Empire, as *one, uniform, imperial, (decimal) currency*.

Some inconvenience must inevitably be felt during the change ; but this would be very slight, and be limited to that period only.

The self-governing provinces—excluded in the proposed changes—would (as far as the currency is concerned), with the exception of Canada and Newfoundland, where the dollar is in use, no doubt at their own time follow the example of the Mother Country.

W. W. H.



# THE DECIMAL PRINCIPLE.

<i>Integer Fraction.</i>	
5 ten-thousands.....	54321 · 234.....4 thousandths
4 thousands.....	.....3 hundredths
3 hundreds.....	.....2 tenths
2 tens.....	.....decimal point
The Unit.....	

THE MOVEMENT OF THE DECIMAL POINT—  
to the right to multiply, and to the left to reduce, be it money,  
weight, or measure.

4321 · 234, multiplied by	10 =	43212·34
” ”	100 =	432123·4
” ”	1000 =	4321234·0
” divided by	10 =	432·1234
” ”	100 =	43·21234
” ”	1000 =	4·321234

THE PRINCIPLE APPLIED TO THE COINAGE, WITH  
THE *FLORIN* AS UNIT AND INTEGER.

<i>florins cents</i>	
Pounds or Sovereigns	.....54321 · 23.....cents
	.....dimes
Florin .....	

# COINAGE TABLE (BRITISH AND COLONIAL).

United Kingdom and Colonies generally.	Cyprus.	Mauritius (and Seychelles), Malta, B. North Borneo, and Nigeria.	Guernsey.	Straits Settlements and East Africa (and Uganda).	Ceylon, Hong-Kong (and Labuan).	British India.	Size in cm.		fl.	£ s. d.
<i>Gold</i> :— 10 florins, "sovereign" 5 florins ...	do. do.	do. do.	do. do.	do. do.	do. do.	do. do.	2.1 1.9	10.00 5.00	1 0 0 10 0	
<i>Silver</i> :— Double-florin ... FLORIN, 100 cents ... 50 cents ... 25 cents ...	... do. do. do.	... do. do. do.	... do. do. do.	... do. do. do.	... do. do. do.	... do. do. do.	3.5 2.8 2.3 1.9	2.00 1.00 .50 .25	4 0 0 2 0 0 1 0 0 6	
<i>Nickel</i> (scalloped) :— 20 cents "dime" ... 10 cents, "dime" ...	do. do.	do. do.	do. do.	do. do.	do. do.	20 pice 10 pice, "dime"	2.5 2.2	.20 .10	5 2½	
<i>Bronze</i> :— 5 cents ... 2 cents... CENT, 100 fl. ...	5 cents, "piastre" do. do.	5 cents do. do. ½ cent	do. do. do. do. ½ cent, "double"	do. do. do. do. ½ cent	do. do. do. do. do.	5 pice 2 pice PIECE ½ pice ... ...	3.1 2.5 2.0 1.7 1.4 1.2	.05 .02 .01 .005 .002 .001	14 ½ ¼ 14 ½ ¼ 14 ½ ¼ 14 ½ ¼ 14 ½ ¼ 14 ½ ¼	

Equivalents Table { *General* :—100 cents (c) } = 1 florin (fl.).  
*Brit. India* :—100 pice (p)



## THE CURRENCY.

### ESSENTIAL CHANGES.

#### PRESENT COINAGE.

The florin,  $\frac{1}{10}$  pound sterling ;  
*equivalent to 96 farthings.*

The farthing,  $\frac{1}{4}$  florin and  $\frac{1}{16}$   
pound sterling.

The pound or sovereign ; gold  
standard ; *represents 20s.*

Four "coins of account"—*farthing, penny, shilling, and pound.*

#### NEW COINAGE.

The florin, *equivalent to 100*  
(British) *cents.* The *acting* unit of  
value, and integer of all sums.

The cent,  $\frac{1}{100}$  florin, and  $\frac{1}{1000}$   
pound sterling.

The pound or sovereign ; gold  
standard and *essential* unit of value ;  
*represents 10 florins.*

Two "coins of account" only—  
*cent and florin.*

### THE UNIT.

The pound or sovereign is too large a sum to serve as the acting unit, and would necessitate three decimal places for the fraction, when sixpence would be represented as £0·025, which in daily use would become intolerable ; whereas with the florin as unit there would be only two decimal places, fl. 0·25. But the pound as a denomination would not be obscured, as *all the figures to the left of the first (or unit) figure of the integer would show pounds* at sight without any arithmetical calculation (see p. 5) ; so that large sums, where the fraction—the negligible quantity—is ignored, could still be quoted in pounds, as is at present done for Revenue comparisons, etc.

### THE COINS.

The *GOLD* coins would remain untouched in value, but might with advantage have their values in florins embossed upon them.

The *SILVER* coins would remain as they are at present, except that the *3d. piece* (12 cents), not being a decimal coin, and the *half-crown* (125 cents), which is too near in value and size to the florin, would be withdrawn, while

## 8 British Currency Decimalised and Imperialised

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the *double-florin* (200 cents) would be restored to circulation. The *florin* might, with advantage, have restored to it the inscription "one-tenth of £1," which was a noticeable feature of the gothic coin of the Victorian period. The *shilling* and *6d. piece* would become 50 and 25 cents respectively.

The *NICKEL*\* coins would be an innovation in the British currency, and represent long-desired intermediate values between the silver and bronze coins of a more durable metal than silver. They would be two in number, consisting of 20 *cents* (approx=5d.) and 10 *cents* or (*British*) "dime" (=2½d.), and their edges would be *scalloped* to distinguish them from the silver coins. They would be legal tender to 5 fl.

The *BRONZE* coins, which, like the silver coins, are merely tokens, representing certain values in relation to the pound sterling, would be depreciated in value by 4 per cent—a change so slight as to be inappreciable. New coins would be issued of 1, 2, and 5 *cents*. The conversion of the *penny* into a 5 *cent* piece need cause inconvenience to no one, as the former amount would be represented by two 2 *cent* pieces; and if the new coins are impressed with their respective figures—1, 2, and 5—even the poorest person would have no difficulty in making his purchases or in receiving and giving change. While in circulation the old penny would represent 4 *cents*. The name "farthing," representing the fractional part of a penny, from the Saxon *feorthung*=a fourth part, would be abolished as being decimally antagonistic, and it would be desirable to offer every facility and encouragement to the general public to forget *pence* and think and calculate in *cents*. By the slight reduction in weight of the three bronze coins, by 5·68, 3·4, and 1·7

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\* Nickel as a metal is to be preferred to aluminium, as the latter is injuriously affected by contact with solutions of soda; and scalloping is preferable to perforation, as the latter interferes with the impressions on the faces of the coins.



*grains*—a reduction which would be immaterial—the 5, 2, and 1 *cents* would weigh 10, 6, and 3 *grams* respectively, and would be useful as decimal weights.

## THE CROWN COLONIES.

In certain colonies coins below the value of a British cent circulate. These coins of low value can all be replaced by the use of three decimal submultiples of the cent. The colonies in CLASS I require for circulation a  $\frac{1}{2}$  cent; those in CLASS II,  $\frac{1}{2}$  and  $\frac{1}{4}$  cents; and those in CLASS III,  $\frac{1}{2}$ ,  $\frac{1}{4}$ , and  $\frac{1}{10}$  cents. (The difference in value between the  $\frac{1}{2}$  and  $\frac{1}{4}$  cents is so infinitesimal as to allow of the two coins of the latter value of Malta and India being included in Class I.) Under each Class is shown the lowest coin circulating in each colony, with its approximate value.

CLASS I:—				fl.
Guernsey ... ..	...	$\frac{1}{2}$ penny or "double"	...	0 005
Mauritius (and Seychelles) ...	...	cent of rupee	...	0 005
Brit. North Borneo ...	...	$\frac{1}{2}$ cent of Mexican dollar	...	0 005
Nigeria ... ..	...	$\frac{1}{10}$ penny (perforated)	...	0 004
Malta ... ..	...	$\frac{1}{4}$ farthing	...	0 003
Brit. India ... ..	...	$\frac{1}{2}$ pice ( $\frac{1}{12}$ anna)	...	0 003
CLASS II:—				
Straits Settlements ...	...	$\frac{1}{2}$ cent of S.S. dollar	...	0 002
East Africa (and Uganda) ...	...	$\frac{1}{2}$ cent of rupee	...	0 002
CLASS III:—				
Ceylon ... ..	...	$\frac{1}{4}$ cent of rupee	...	0 001
Hong Kong (and Labuan) ...	...	$\frac{1}{10}$ cent of Mexican dollar	...	0 001

In British India, where the *pice* is equivalent in value to the British farthing, there would be no difficulty in making the necessary change, the natives being accustomed to make their calculations in that denomination. The *rupee* consists of 16 *annas* and 64 *pice*. The *pice* would suffer the same slight depreciation as the British farthing. As regards the other rupee-using colonies—Ceylon, Mauritius (and Seychelles), and East Africa (and Uganda)—the coinages of these differ from that of India in that they are already decimalised,

and the natives are thus accustomed to calculate decimally by cents.

Any characteristic features special to particular coins, such as the triple leg of Man, and the central perforation of Nigerian and East African coins, could, of course, be reproduced.

### RULE FOR CONVERSION OF MONEY.

*Convert to florins, and reckon 1s. and 6d. as 50 and 25 cents respectively, and fractions of 6d. as 4 cents to the penny.* Example:—

$$£5\ 9\ 10\frac{1}{2} = 54\cdot00 + 0\cdot75 + 0\cdot18 = \text{fl. } 54\cdot93$$

### CHIEF EFFECTS OF THE CHANGE.

Articles hitherto sold at *per dozen* and *per gross* would now be sold at *per ten*, *per hundred*, and *per thousand*. As a dozen articles at 20s=one at 20 pence, so ten at 8 florins (fl. 8·00) would=one at 80 cents (fl. 0·80), 100 at fl. 80·00, and 1000 at fl. 800·00 (or £80). The equivalent to the ounce is generally taken as 30 grams (actually 28·35 gm.), and to the pound 500 grams (actually 453·59 gm.).

*For Domestic commodities*, small articles would be sold by the *gram*, larger ones by the *kilogram* (1000 gm.). Our English (1d.) roll weighs about 85 grams. The lb.-loaf would become the 500 gram or “half-kilo” loaf; the 2-lb. loaf the “kilo” (1000 gm.) loaf. *Coal* would be sold by the 50 and 100 “kilo” sacks (=1 and 2 cwt.) A ton, being equivalent to the metric “tonne” (1000 kilos), need not change its name. A ton of coals would be delivered in 10 quintal (10 hundred-kilo) sacks of 2 cwt. each.

The Tariffs of the various Government departments would require revision, which, by the use of the above rule, could be effected by a junior clerk in an hour or



two. Thus, a 5d. duty would become a 20 cent duty (fl. 0·20); a 6d. Agreement stamp would become a 25 cent stamp. The penny postage would now become 4 cents, and the weight be 120 grams (instead of 4 oz.), and for every additional 60 grams the postage would be 2 cents. By the slight depreciation in the value of the cent (over the old farthing), the public would, with regard to postage, gain an equivalent advantage. Parcels under 500 grams in weight (1 lb.) would be sent for 12 cents. The postal charges would, however, probably undergo a special revision.

#### DECIMAL EQUIVALENTS OF THE FLORIN.

	fl.		fl.
Dollar (U.S.A.)	... 2 04	Krone (Austria Hungary)	0 42
Franc (Latin Union)	... 0 39	Krona (Denmark, Norway, and Sweden)	0 56
Mark (Germany)	... 0 49	Rouble (Russia)	... 1 06

#### WEIGHTS AND MEASURES.

The use of the Metric System was made permissive by the Act of 1897. It is now proposed that it should be made compulsory, and the use of the old weights and measures pronounced illegal. It is also suggested that the word *litre* be spelt "letre," in order to preserve its correct pronunciation; and the multiple prefix *deca* be spelt with a *k* instead of with a *c*, to distinguish from the fractional prefix *deci*, which is already done by the medical profession and the manufacturing chemists; also that the word *gramme* be anglicised and abbreviated to "gram."

Suggested Clauses for new "Currency" and "Weights and Measures" Bills; to come into force on April 6—the commencement of the financial year of the Inland Revenue—of any year; and to apply to all Crown Colonies, excepting the self-governing Provinces of New-

foundland, the Dominions of Canada and New Zealand, the Commonwealth of Australia, and the Union of South Africa :—

## THE NEW CURRENCY BILL.

1. Notwithstanding anything in the Currency Acts of 1816 and 1870, the *florin* shall be the acting unit of value, and shall have 100 equal subdivisions or (British) “cents,” which in British India shall be known as “pice.” While in circulation the farthing shall represent 1 *cent*, the half-penny and penny 2 and 4 *cents* respectively.

2. All money accounts shall be kept and rendered in decimals, with the *florin* as integer, and shall show *tenths* and *hundredths* of the same. And accounts rendered in any other manner are hereby declared null and void.

3. Two new coins of *nickel*, scalloped for distinction, will be issued—viz., 20 (*British*) *cents* and 10 (*British*) *cents* or (*British*) “*dime*,” which shall be legal tender to 5 fl.

4. New bronze coins of 1, 2, and 5 *cents* will be issued. Also of the following values—viz.,  $\frac{1}{2}$  *cents* for circulation in *Guernsey*, *Malta*, *Mauritius* (and *Seychelles*), *Brit. North Borneo*, *Nigeria*, and  $\frac{1}{2}$  *pice* for *Brit. India*;  $\frac{1}{2}$  and  $\frac{1}{4}$  *cents* for circulation in *Straits Settlements* and *East Africa* (and *Uganda*); and  $\frac{1}{2}$ ,  $\frac{1}{4}$ , and  $\frac{1}{16}$  *cents* for circulation in *Ceylon* and *Hong Kong* (and *Labuan*); which shall be legal tender to one dime.

5. Certain coins shown in the schedule attached hereto will be withdrawn from circulation, and may be redeemed at a Post Office or Bank at rates of exchange indicated therein.

## THE NEW WEIGHTS AND MEASURES BILL.

1. Whereas, by the Weights and Measures Act of 1897, the use of the Metric System was declared to be



lawful, be it now enacted that, notwithstanding anything in that or any previously existing statute, the Metric Weights and Measures shall become the *standard Imperial Weights and Measures*, and shall be used in all dealings whatsoever. And all other dealings by other weights or measures shall be null and void. And for measurements of *temperature* the "celcius" or "centigrade" thermometer shall be the only official and authoritative one. But nothing in this enactment shall affect "angular," "circular," or "electric" measures.

2. When or wherever, in any statute relating to the sale of bread or coal, a *pound* is mentioned it shall be taken to be equivalent to 2 kg.; a *hundred-weight* to 50 kg.; and the *ton* to 1000 kg.

3. When or wherever, in any statute relating to cabs, Hackney carriages, or locomotives on highways, a *mile* is mentioned it shall be taken in relation to distances and speeds to be equivalent to 1.50 km., and all multiples or sub-multiples of a mile, for the same purposes, shall be reckoned on that basis.

4. County Councils shall remark and refix all mile-stones and mileposts on main roads within their districts at intervals of *kilometres*, and shall supply and fix all necessary extra *kilostones* and *kiloposts*; and the cost of such work shall be borne by a county rate, for which each County Council shall have power to raise a loan. And the officer or officers for the time being of the division of Ordnance Survey in which each county lies shall supply all information required by the County Surveyor as to distances from and to adjacent villages towns, or cities in *kilometres* and *decimals* thereof.

## SCHEDULE (TO NEW CURRENCY BILL).

COINS TO BE WITHDRAWN.	—	Ex- change Rate.	—	Circu- lating Value.	
<i>U.K., Man, Channel Islands, Malta, Brit. West Indies, Brit. South Ame- rica, and Nigeria:—</i>		fl.		fl.	
<i>Half-crown</i> - - - -	Each	1'25	...	1'25	
<i>Groat (4d.)—Brit. Guiana</i> - -	3 for	50	...	16	
<i>Threepenny piece</i> - - - -	4 for	50	...	12	
<i>½ farthing—Malta</i> - - - -	30 for	10	...	003	
<i>½ penny ("double"), 4 and 8— Guernsey</i> - - - -	} Aggregate to 3d.	12	{ 8 4 1	04 02 005	
<i>⅓ penny—Nigeria</i> - - - -		10		...	004
<i>Other Crown Colonies:—</i>					
<i>Rupee (1s. 4d.)—Brit. India, Ceylon, Mauritius (and Seychelles), East Africa (and Uganda)</i> - - - -	}	...	66	...	66
<i>½ pice (⅓ anna)—Brit. India</i> - -		30 for	10	...	003
<i>Cents of Rupee—Ceylon, Mauritius (and Seychelles), East Africa (and Uganda)</i> - - - -	}	Aggregate to 18 c.	10	...	005
<i>½ cents of ditto—Ceylon, East Africa (and Uganda)</i> - - - -				...	002
<i>¼ cents of ditto—Ceylon</i> - - - -				...	001
<i>Dollar, Mexican (1s. 11½d.)—Brit. Honduras, Hong Kong (and Labuan)</i> - - - -	}	...	99	...	99
<i>Cents of ditto</i> - - - -		Aggregate to 11 c.	10	...	01
<i>⅓ cent—Hong Kong (and Labuan)</i> -			...	...	001
<i>Dollar S.S. (2s. 4d.)—Straits Settle- ments and Brit. N. Borneo</i> - -	}	...	1 16	...	1 16
<i>Cents of ditto, and ½ cents</i> - -		Aggregate to 25 c.	29	{ 1 ½	01 005
<i>¼ cents of ditto, Straits Settlements</i> -			...		002
<i>Piastre (1½d.), ½ and ¼—Cyprus</i> -	{	Aggregate to 3 p.	16	{ 1 ½ ¼	05 02 01

## METRIC WEIGHTS AND MEASURES.

## I. MEASURES OF WEIGHT.

*(Measures for light goods.)*

10 Milligrams, <i>mg</i>	=	1 centigram, <i>cg</i>	... ..	0·01 gm.
10 Centigrams	=	1 decigram, <i>dg</i>	... ..	0·1 gm.
10 Decigrams ...	=	1 Gram, <i>gm</i> (the unit.=15·43 grs.)	... ..	1·0 gm.
10 Grams ...	=	1 dekagram, <i>dkg</i>	... ..	10·0 gm.
10 Dekagrams	=	1 hectogram, <i>hg</i>	... ..	100·0 gm.
10 Hectograms	=	1 kilogram, <i>kg</i> (the standard.= 2lbs. 3½ oz.)	... ..	1,000·0 gm.

*(Measures for heavy goods.)*

10 Kilograms ...	=	1 myriagram, <i>mg</i>	... ..	10·0 kg.
10 Myriagrams	=	1 quintal, <i>q</i> (=1·96 cwt.)	... ..	100·0 kg.
10 Quintals ...	=	1 ton, <i>t</i> (=0·98 B. ton)	... ..	1,000·0 kg.

## II. MEASURES OF CAPACITY.

10 Centimils, <i>cmil</i>	=	1 decimil, <i>dml</i>	... ..	0·0001 lit.
10 Decimils ...	=	1 millilitre (mil), <i>ml</i> (=1 c. cg)	... ..	0·001 lit.
10 Millilitres ...	=	1 centilitre, <i>cl</i>	... ..	0·01 lit.
10 Centilitres ...	=	1 decilitre, <i>dl</i>	... ..	0·1 lit.
10 Decilitres ...	=	1 Litre, <i>lit</i> (unit and standard. =1½ pints)	... ..	1·0 lit.
10 Litres ...	=	1 dekalitre, <i>dkl</i>	... ..	10·0 lit.
10 Dekalitres ...	=	1 hectolitre, <i>hl</i>	... ..	100·0 lit.
10 Hectolitres...	=	1 kilolitre, <i>kl</i>	... ..	1,000·0 lit.
10 Kilolitres ...	=	1 myrialitre, <i>myl</i>	... ..	10,000·0 lit.

## III. MEASURES OF LENGTH.

*Microscopic Measure.*

1000 Microns, $\mu$	=	1 millimetre, <i>mm</i>	... ..	0·001 mm.
---------------------	---	-------------------------	--------	-----------

*Long Measure.*

10 Millimetres	=	1 centimetre, <i>cm</i>	... ..	0·01 m.
10 Centimetres	=	1 decimetre, <i>dm</i>	... ..	0·1 m.
10 Decimetres	=	1 Metre, <i>m</i> (unit and standard. =39·37 m.)	... ..	1·0 m.

*Itinerary Measure.*

10 Metres ...	=	1 dekametre, <i>dkm</i>	... ..	10·0 m.
10 Dekamitres	=	1 hectometre, <i>hm</i>	... ..	100·0 m.
10 Hectometres	=	1 kilometre, <i>km</i> (=0·62 mile)	... ..	1,000·0 m.
10 Kilometres...	=	1 myriametre, <i>mym</i>	... ..	10·0 km.

## IV. SQUARE MEASURE.

10 Centiares, <i>ca</i>	=	1 deciare, <i>da</i>	... ..	10·0 sq.m.
10 Deciares ...	=	1 are, <i>a</i>	... ..	100·0 sq.m.
10 Ares ...	=	1 dekare, <i>dka</i>	... ..	1,000·0 sq.m.
10 Dekares ...	=	1 hectare, <i>ha</i> (=2·47 acres)	... ..	10,000·0 sq.m.
100 Hectares ...	=	1 sq. kilometre	... ..	1·0 sq.km.

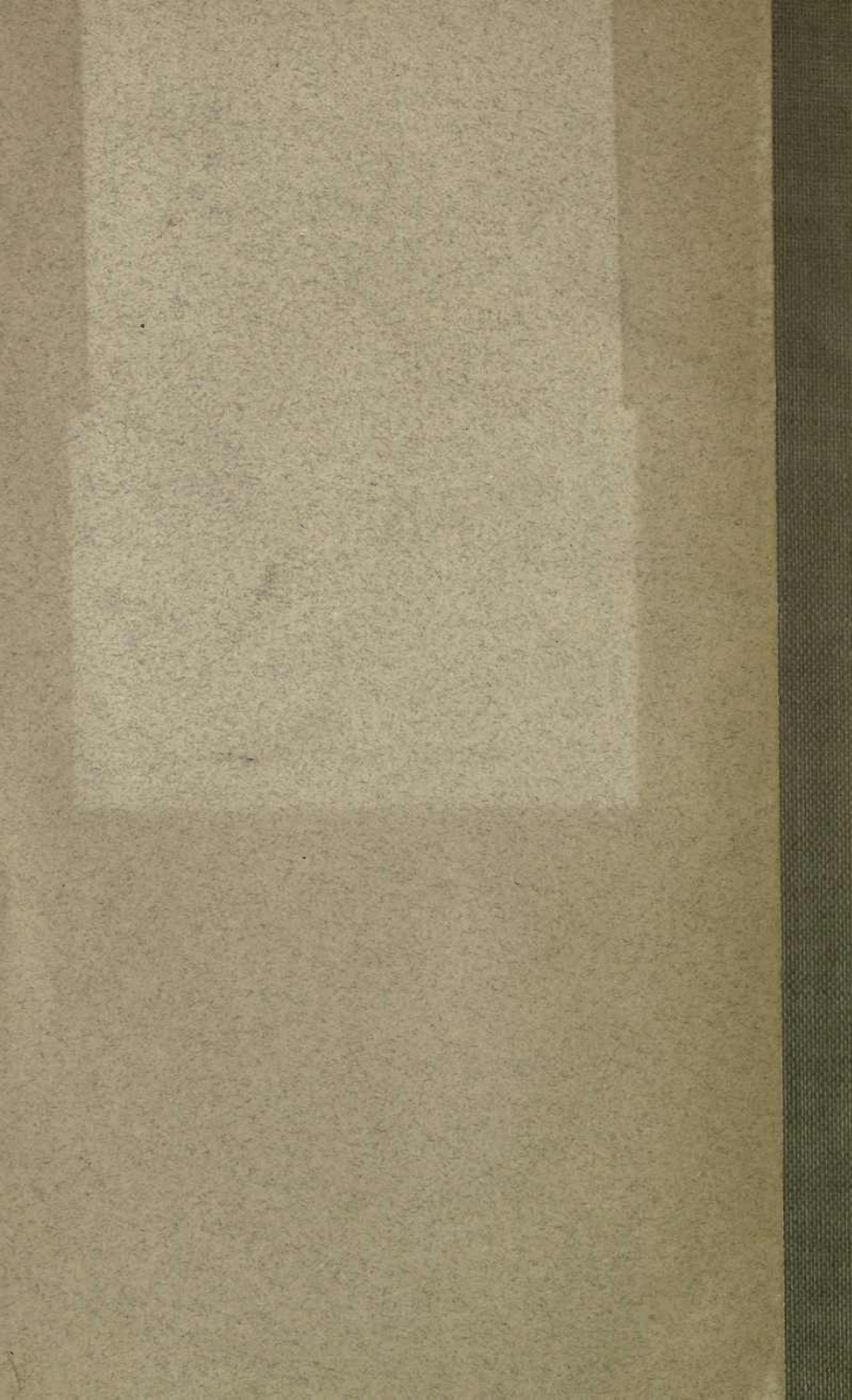
## V. CUBIC MEASURE.

10 Decistères, <i>ds</i>	=	1 stère, <i>s</i>	... ..	1·0 c.m.
10 Stères ...	=	1 dekastère, <i>dks</i>	... ..	10·0 c.m.



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